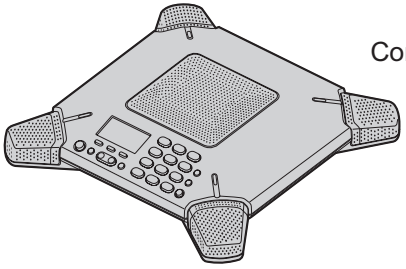
Panasonic

Operating Instructions



Conference Recording Speakerphone System

Model No. **KX-TS730AZ**

This unit is compatible with Caller ID. To use this feature, you must subscribe to the appropriate service offered by your service provider.

For New Zealand customers
This unit's factory setting of the recall time is 100 ms.
Please change the recall time depending on your situation (see page 12, page 24 for the direction).

Please read these Operating Instructions before using the unit and save for future reference.

Introduction

Accessory information 3
Important safety instructions 4
For best performance 6

Preparation

Connections 7
If you subscribe to an ADSL service . 8
Controls and displays 9
Controls 9

Making/Answering Calls

Making calls 11
PAUSE button (for PBX/long distance service users) 11
Answering calls 12
Useful features during a call 12
MUTE button 12
Recall button 12
For Call Waiting service users 12

Phonebook

Using the phonebook 13
Adding items to the phonebook . . . 13
Calling someone in the phonebook . 14
Editing items in the phonebook 15
Erasing an item in the phonebook . . 15
Erasing all items in the phonebook . 15
Chain dial feature 16

Caller ID Service

Using Caller ID service 17
Caller ID features 17
Caller list 18
Viewing the caller list and calling back 18
Editing a caller's phone number before calling back 18
Storing caller information into the phonebook 18
Erasing caller information 19

Programmable Settings

Programming via direct commands . . . 20
Direct commands chart 20
Programming using the function keys . 22
Ringer settings 23
Ringer volume 23
Ringer tone 23
Display options 23
LCD contrast 23
Telephone settings 24
Recall time 24
Storing your area code 24
Other options 25
Key tone 25

Recording a Conversation

Recording a conversation 26
Playing back a recorded conversation . 27

Useful Information

Display messages 29
Troubleshooting 29
General use 29
Programmable settings 29
Making/answering calls 30
Phonebook 31
Caller ID 31
Power failure 31
Instructions to customer (For Australian users) 32
Specifications 34

Index

Index 35

Thank you for purchasing a Panasonic Conference Recording Speakerphone System.

We recommend keeping a record of the following information for future reference.

Serial No. _____ Date of purchase _____

(found on the bottom of the unit)

Name and address of dealer _____

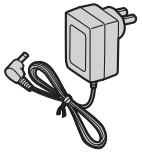
Attach your purchase receipt here.

Accessory information

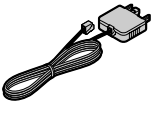
Included accessories

No.	Accessory items	Quantity
①	AC adaptor	1
②	Telephone line cord	2
③	Interface cable	1
④	Interface box	1

①



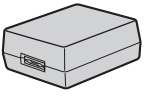
② **For Australia**



For New Zealand

③

④



Important safety instructions

When using this unit, basic safety precautions should always be followed to reduce the risk of fire, electric shock, or personal injury.

1. Read and understand all instructions.
2. Follow all warnings and instructions marked on this unit.
3. Unplug this unit from power outlets before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use this unit near water, for example near a bathtub, wash bowl, kitchen sink, etc.
5. Place the unit securely on a stable surface. Serious damage and/or injury may result if the unit falls.
6. Do not cover slots and openings on the unit. They are provided for ventilation and protection against overheating. Never place the unit near radiators, or in a place where proper ventilation is not provided.
7. Use only the power source marked on the unit. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
8. Do not place objects on the power cord. Install the unit where no one can step or trip on the cord.
9. Do not overload power outlets and extension cords. This can result in the risk of fire or electric shock.
10. Never push any objects through slots in this unit. This may result in the risk of fire or electric shock. Never spill any liquid on the unit.
11. To reduce the risk of electric shock, do not disassemble this unit. Take the unit to an authorised service centre when service is required. Opening or removing covers may expose you to dangerous voltages or other risks. Incorrect reassembly can cause electric shock when the unit is subsequently used.
12. Unplug this unit from power outlets and refer servicing to an authorised service centre when the following conditions occur:
    A. When the power cord is damaged or frayed.
    B. If liquid has been spilled into the unit.
    C. If the unit has been exposed to rain or water.
    D. If the unit does not work normally by following the operating instructions. Adjust only controls covered by the operating instructions. Improper adjustment may require extensive work by an authorised service centre.
    E. If the unit has been dropped or physically damaged.
    F. If the unit exhibits a distinct change in performance.
13. During thunderstorms, avoid using telephones except cordless types. There may be a remote risk of an electric shock from lightning.
14. Do not use this unit to report a gas leak, when in the vicinity of the leak.

SAVE THESE INSTRUCTIONS

CAUTION:

Installation

- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.

- Do not touch the plug with wet hands.
- The AC adaptor is used as the main disconnect device. Ensure that the AC outlet is installed near the unit and is easily accessible.

WARNING:

- To prevent the risk of fire or electrical shock, do not expose this product to rain or any type of moisture.
- Unplug this unit from power outlets if it emits smoke, an abnormal smell or makes an unusual noise. These conditions can cause fire or electric shock. Confirm that smoke has stopped and contact an authorised service centre.

Notice

- Please ensure that a separate telephone, not dependent on local power, is available for emergency use.
- This equipment will be inoperable when mains power fails.
- When a failure occurs which results in the internal parts becoming accessible, disconnect the power supply cord immediately and return this unit to an authorised service centre.
- To minimise the possibility of lightning damage, when you know that a thunderstorm is coming, we recommend that you:
  – Unplug the telephone line cord from the phone jack.
  – Unplug the power supply cord from the AC power outlet.
- This equipment has been tested and found to comply with AS/NZS CISPR22: 2002 limits for electromagnetic interference. Any modifications to any part of the system or to any peripherals may void the EMC compliance of the system or the peripherals.

For New Zealand users only

- Disconnect the telecom connection before disconnecting the power connection prior to relocating the equipment, and reconnect the power first.
- The grant of a Telepermit for any item of terminal equipment indicates only that Telecom has accepted that the item complies with minimum conditions for connection to its network. It indicates no endorsement of the product by Telecom, nor does it provide any sort of warranty. Above all, it provides no assurance that any item will work correctly in all respects with another item of Telepermitted equipment of a different make or model, nor does it imply that any product is compatible with all of Telecom's network services.
- Not all telephones will respond to incoming ringing when connected to the extension socket.
- This equipment may not provide for the effective hand-over of a call to another device connected to the same line.
- No "111" or other calls can be made from this device during a mains power failure. This equipment shall not be set to make automatic calls to the Telecom "111" Emergency Service.

For Australian users only

- No "000" or other calls can be made from this device during a mains power failure.

Important notice

- Under power failure conditions, this telephone may not operate. Please ensure that a separate telephone, not dependent on local power, is available for emergency use.

For best performance

Environment

- Keep the unit away from electrical noise generating devices, such as fluorescent lamps and motors.
- The unit should be kept free from excessive smoke, dust, high temperature and vibration.
- The unit should not be exposed to direct sunlight.
- Do not place heavy objects on top of the unit.
- When you leave the unit unused for a long period of time, unplug this unit from power outlet.
- The unit should be kept away from heat sources such as heaters, kitchen stoves, etc. It should not be placed in rooms where the temperature is less than 5 °C or greater than 40 °C. Damp basements should also be avoided.

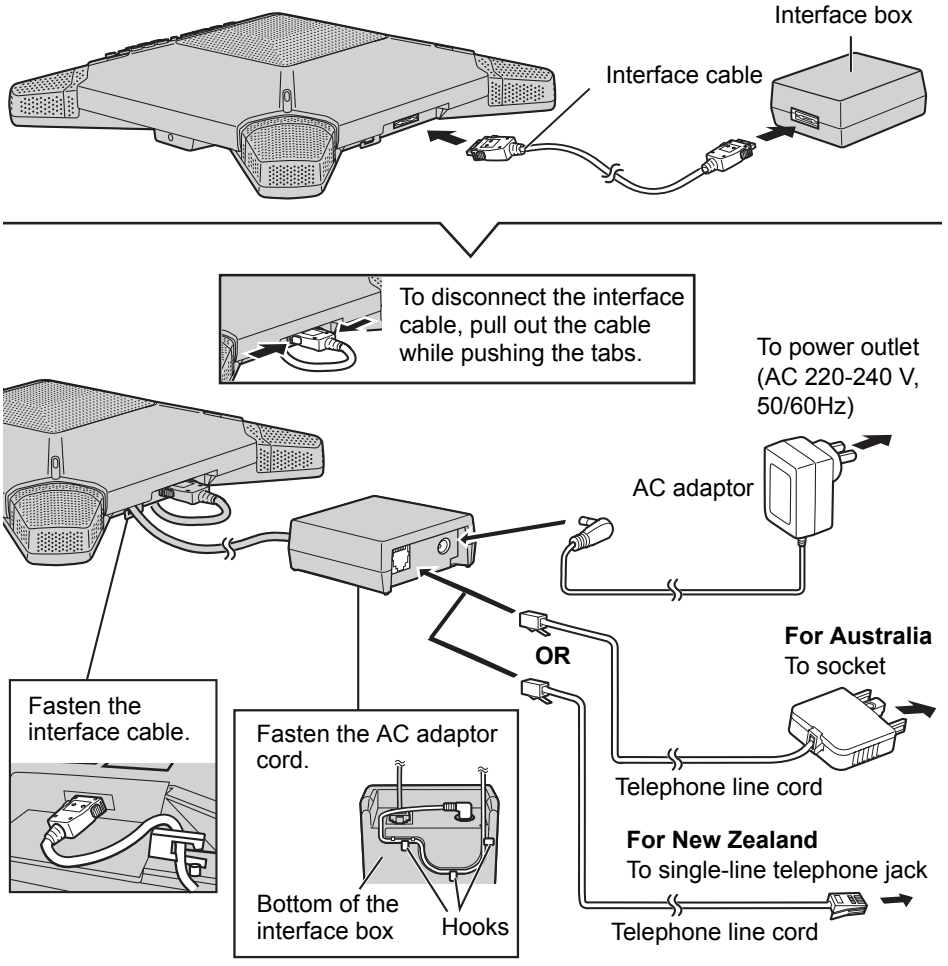
Routine care

- Wipe the outer surface of the unit with a soft cloth. Do not use benzine, thinner or any abrasive powder.

Operation

- At the beginning of a call, both parties should speak alternately. This enables the unit to adapt to its environment and let both parties speak effectively.
- Do not move the unit while it is in use.
- Keep your hands away from the unit during calls.
- Keep files, cups, coffee pots, etc., away from the unit.
- Use the unit in a quiet room.
- This unit is designed to be used in a room that is no more than 35.3 m^2 in area.

Connections



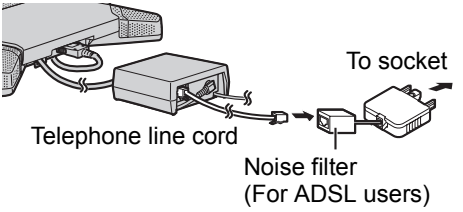
Note:

- Use only provided Panasonic AC adaptor PQLV206AL (9V/750 mA) for proper product operation. In case of power outage, this product will not work.
- The AC adaptor must remain connected at all times. (It is normal for the adaptor to feel warm during use.)
- The AC adaptor should be connected to a vertically oriented or floor-mounted AC outlet. Do not connect the AC adaptor to a ceiling-mounted AC outlet, as the weight of the adaptor may cause it to become disconnected.
- The unit will not work during a power failure. We recommend connecting a standard telephone to the same telephone line or to the same telephone jack using a telephone double adaptor (for Australia) or a T-adaptor (for New Zealand).
- The unit is not designed to be used with rotary (pulse dialling) services.

If you subscribe to an ADSL service

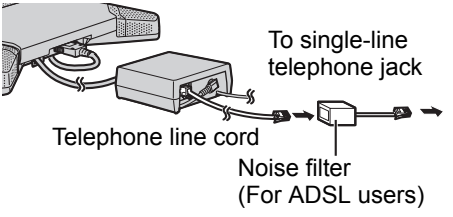
For Australian users

- Please attach a noise filter (contact your ADSL provider) to the telephone line between the interface box and the telephone line socket in the event of the following:
  – Noise is heard during conversations.
  – Caller ID features (page 17) do not function properly.



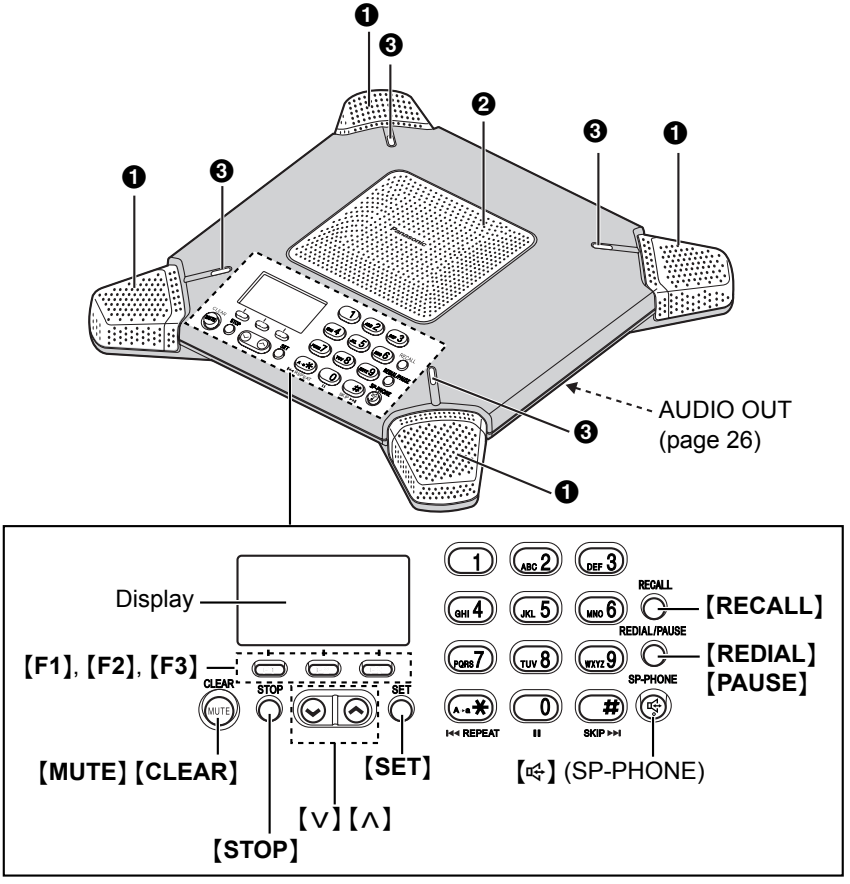
For New Zealand users

- Please attach a noise filter (contact your ADSL provider) to the telephone line between the interface box and the telephone line jack in the event of the following:
  – Noise is heard during conversations.
  – Caller ID features (page 17) do not function properly.



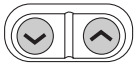
Controls and displays

Controls



❶ Microphone ❷ Speaker ❸ IN USE Indicator

Using the 【∨】 and 【∧】 keys

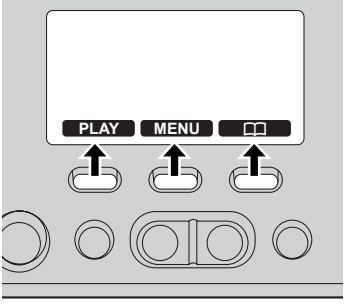


- The keys work as the speaker volume keys (page 11).
- Pressing the keys allows you to scroll through function menu (page 22).
- Pressing the keys allows you to enter the caller list (page 18).

Function keys (【F1】, 【F2】, 【F3】)

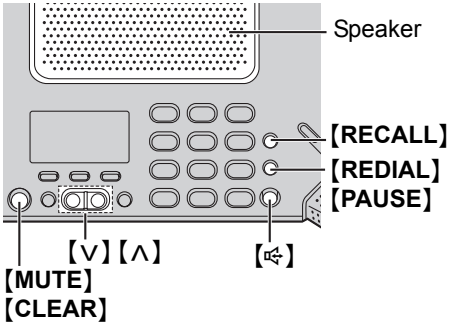
By pressing a function key, you can select the function displayed directly above it.

- The functions displayed will vary depending on how you are using the unit.
- When a function does not appear or ▒▒▒▒▒▒ is displayed above a function key, the function key will not work.



- In these operating instructions, function key names are written inside brackets, the same way as the unit keys.
  Example:
  Unit keys: 【⏏】, **【STOP】**, etc.
  Function keys: **【PLAY】**, **【MENU】**, **【🕮】**, etc.

Making calls



1 Press 【】.
- IN USE indicators will light in green.

2 Dial the phone number.

3 When finished talking, press 【】.

Note:
- At the beginning of a call, both parties should speak alternately. This enables the unit to adapt to its environment and let both parties speak effectively.
- If the other party has difficulty hearing you, press 【∨】 to decrease the speaker volume.
- Use the unit in a quiet room.

To adjust the speaker volume

Press 【∨】 or 【∧】 repeatedly during a conversation. 16 levels (high to low) are available. "`Receiver volume`" is displayed.

To dial after confirming the entered number

1 Enter the phone number.
- To correct a digit, press 【CLEAR】. Enter the correct number.
- If a pause is required when dialling, press 【PAUSE】 where needed.
- To cancel, press and hold 【CLEAR】 until the entered phone number disappears.

2 Press 【】 or 【CALL】 (【F1】 key).

3 When finished talking, press 【】 to hang up.

To redial the last number dialled

1 Press 【】.

2 Press 【REDIAL】.

To make a call using the redial list

The last 10 phone numbers dialled are stored in the redial list.

1 Press 【REDIAL】.
- The last number dialled will be displayed.

2 Press 【∨】 or 【∧】 repeatedly to display the desired number.
OR
Press 【REDIAL】 repeatedly to display the desired number.
- To delete the displayed item, press 【ERASE】 (【F1】 key).
- To exit the list, press 【STOP】.

3 Press 【】 or 【CALL】 (【F3】 key).

PAUSE button (for PBX/long distance service users)

A pause is sometimes required when making calls using a PBX or long distance service.
For example, if you need to dial the line access number "9" when making outside calls with a PBX:

1 Press 【9】.

2 Press 【PAUSE】, then dial the phone number.

3 Press 【】 or 【CALL】 (【F1】 key).

Note:
- A 3.5 second pause is inserted each time 【PAUSE】 is pressed. Press repeatedly to insert longer pauses.

Answering calls

When a call is being received, the IN USE indicators flash.

1 Press 【📞】.

2 When finished talking, press 【📞】.

Adjusting the ringer volume
4 levels (high/medium/low/off) are available. To change the ringer volume setting, see page 23.
OR
While a call is being received, press 【∨】 or 【∧】 repeatedly to select the desired volume.

Useful features during a call

MUTE button

You can mute your voice during a conversation. While mute is turned on you will be able to hear the other party, but the other party will not be able to hear you. To mute your voice, press **【MUTE】**.

- "**-Mute-**" will be displayed and the IN USE indicators will light in red.
- To return to the conversation, press **【MUTE】**.

Recall button

Pressing **【RECALL】** allows you to use special features of your host PBX such as transferring an extension call, or accessing optional telephone services such as Call Waiting.

Note:

- To change the recall time, see page 24.

For Call Waiting service users

To use Call Waiting, you must subscribe to Call Waiting service from your service provider. If you receive a call while on the phone, you will hear a Call Waiting tone. You can answer the 2nd call, keeping the 1st call on hold.

For Australian users only
Follow Telstra or your service provider instructions using **【RECALL】**.

- Even if you subscribe to Caller ID service, this unit does not support the service of the 2nd caller's information display.

For New Zealand users only
Change the recall time to 600 ms for use with Telecom's Call Waiting service (page 24).
Press **【RECALL】** to answer the 2nd call.

Important:

- Please contact Telstra or your service provider for details and availability in your area.

Using the phonebook

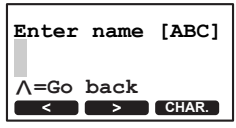
The phonebook allows you to make calls without having to dial manually. You can add 100 names and phone numbers to the phonebook and search for phonebook entries by name.

Adding items to the phonebook

1 Press 【📖】 (【F3】 key).
- The display shows the number of items in the phonebook.

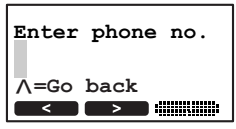
2 Press 【ADD】 (【F1】 key).

3 Enter the name (max. 16 characters. See "Available character entries" for details).



4 Press 【SET】.

5 Enter the phone number (max. 32 digits).



- If a pause is required when dialling, press 【PAUSE】 where needed (page 11).

6 Press 【SET】 or 【SAVE】 (【F3】 key).
- To add other items, repeat from step 2.
- If you want to change the name and/or number, see page 15.

7 Press 【STOP】.

Note:
- When "^=Go back" is displayed, you can go back to the previous screen by pressing 【^】.
- Your telephone company may charge you for a local call if the number dialled has the area code prefix included. If this is unacceptable, dial only the 7-digit local number. Do not dial the "0" prefix or the area code **(For New Zealand users only)**.

Available character entries

2 character entry modes (Alphabet character and Extended character) are available. To change the current character entry mode, press 【CHAR.】 (【F3】 key) on the enter name screen.
- When Alphabet character mode is selected, "[ABC]" is displayed on the enter name screen. When Extended character mode is selected, "[AÄÅ]" is displayed.
- To change between uppercase and lowercase (A→a), press 【✳】.

Alphabet character table

Key	Characters
【0】	0 Space
【1】	# & ' ( ) * , – . / 1
【2】	A B C 2
	a b c 2
【3】	D E F 3
	d e f 3
【4】	G H I 4
	g h i 4
【5】	J K L 5
	j k l 5
【6】	M N O 6
	m n o 6
【7】	P Q R S 7
	p q r s 7
【8】	T U V 8
	t u v 8
【9】	W X Y Z 9
	w x y z 9
【#】	#

Extended character table

Key	Characters
【0】	0 Space
【1】	# & ' ( ) ∗ , – . / 1
【2】	A B C À Á Â Ã Ä Å Æ Ç 2
	a b c à á â ã ä å æ ç 2
【3】	D E F È É Ê Ë Ẽ 3
	d e f è é ê ë ẽ 3
【4】	G H I Ì Í Î Ï Ĩ Ỉ Ǐ 4
	g h i ì í î ï ĩ ı ǐ 4
【5】	J K L 5
	j k l 5
【6】	M N O Ñ Ò Ó Ô Õ Ö ø*1 6
	m n o ñ ò ó ô õ ö ø*1 6
【7】	P Q R S Ş*1 ß 7
	p q r s Ş*1 ß 7
【8】	T U V Ù Ú Û Ü Ũ 8
	t u v ù ú û ü ũ 8
【9】	W X Y Z Ŵ*1 9
	w x y z Ŵ*1 9
【#】	#

*1 The same letter as capital (or small) will be displayed.

To enter character or number

The dial keys can be used to enter characters. To enter a character, press the appropriate dial key, repeatedly if necessary. To enter another character that is located on the same dial key, first press 【>】(**【F2】** key) to move the cursor to the next space.

To edit/correct a mistake

Press 【<】(**【F1】** key) or 【>】(**【F2】** key) to move the cursor to the character or number you wish to erase, then press **【CLEAR】**. Enter the appropriate character or number.

Note:

- Press and hold **【CLEAR】** to erase all characters or numbers.

Calling someone in the phonebook

Phonebook items can be searched for alphabetically by scrolling through the phonebook items.

1 Press 【📖】(**【F3】** key).

2 Press 【∨】or 【∧】to scroll the phonebook items.
- To exit the phonebook, press **【STOP】**.

3 Press **【CALL】**(**【F1】** key) or 【📞】.

To search for a name by initial

1 Press 【📖】(**【F3】** key).

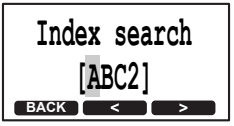
2 Press the dialling button (**【0】** to **【9】**, 【#】, or 【∗】) which corresponds to the first letter you are searching for (see the character table, page 13).
Example: "**LISA**"
Press **【5】** repeatedly to display any name with the initial "**L**".
- If there is no item corresponding to the letter you selected, the next item will be displayed.

3 Press 【∨】or 【∧】repeatedly to display the desired item.
- To exit the phonebook, press **【STOP】**.
- To dial the displayed number, press **【CALL】**(**【F1】** key) or 【📞】.

To search using [SEARCH]

1 Press [📖] ([F3] key).

2 Press [SEARCH] ([F3] key).



Example: "SAM"
Press [∨] five times.
Press [>] ([F3] key) three times.

3 Press [SET].
- If there is no item corresponding to the letter you selected, the next item will be displayed.

4 Press [∨] or [∧] repeatedly to display the desired item.
- To dial the displayed number, press [CALL] ([F1] key) or [📞].

Editing items in the phonebook

1 Search the item you want to edit.

2 Press [MENU] ([F2] key).

3 Press [SELECT] ([F3] key) at "Edit".

4 Edit the name if necessary. See the character table on page 13 for character entry.

5 Press [SET].

6 Edit the phone number if necessary.

7 Press [SET] or [SAVE] ([F3] key).
- To edit other items, repeat from step 1.

8 Press [STOP].

Erasing an item in the phonebook

1 Search the item you want to erase.

2 Press [MENU] ([F2] key).

3 Press [∨] or [∧] to select "Erase".

4 Press [SELECT] ([F3] key).

5 Press [YES] ([F2] key).
- To cancel erasing, press [NO] ([F1] key).
- To erase other items, repeat from step 1.

6 Press [STOP].

Erasing all items in the phonebook

1 Press [📖] ([F3] key).

2 Press [MENU] ([F2] key).

3 Press [SELECT] ([F3] key) at "All erase".
- "All erase?" will be displayed.

4 Press [YES] ([F2] key).
- To cancel erasing, press [NO] ([F1] key).

5 Press [STOP].

Chain dial feature

This feature allows you to dial phone numbers from the phonebook while you are on a call.
Example: Using a long distance calling card

① Dial from the phonebook: 0800012345 (Calling card access number).
② When prompted, dial from the phonebook: 1234 (Calling card PIN).
③ When prompted, dial from the phonebook: 0555012345 (the person you want to call).

1 **During an outside call,** press **【📖】** (**【F3】** key).

2 Display the desired item. (See page 14 for a search.)

3 Press **【CALL】** (**【F1】** key).
- Repeat from step 1 to dial other numbers.

Note:

- When storing a calling card access number and your PIN in the phonebook as one phonebook item, press **【PAUSE】** to add pauses after the number and PIN as necessary (page 11).

Using Caller ID service

This unit is Caller ID compatible. To use Caller ID features, you must subscribe to your telephone company's Caller ID service.

For New Zealand users

For all local and national incoming calls, your display will show the area code (e.g. 09 for Auckland) or the cellular prefix (e.g. 027 for Telecom Cellular) followed by the caller's phone number. An Auckland caller's number will be displayed as 09XXXXXXX. The 7 X's represent the 7 digits of the caller's phone number. A caller from a 7-digit Telecom Cellular number will be displayed as 027XXXXXXX. For incoming international calls, your display may only show "0000". For business users on a Centrex line, your display will show Centrex extension numbers in the shorter extension number format used within your company.

Using toll services from Telecom or another company

Your telephone company may charge you for a local call if the number dialled has the area code prefix included. If this is unacceptable, dial only the 7-digit local number. Do not dial the "0" prefix or the area code.

Caller ID features

When an outside call is being received, the calling party's telephone number will be displayed.

Phone numbers for the last 50 different callers will be logged in the caller list, allowing you to return missed calls. Caller information is stored by the most recent call to the oldest.

- When Caller ID information is received and it matches a phone number stored in the phonebook, the stored name will be displayed and logged in the caller list. **(Private name display)**
- If the unit cannot receive caller information, the following will be displayed:
  "**`Out of area`**": The caller dialled from an area which does not provide Caller ID service.
  "**`Private caller`**": The caller requested not to send caller information.
- If the unit is connected to a PBX system, caller information may not be received properly. Consult your PBX supplier.
- If the name display service is available your area, the display will show caller names. For further information, please contact your telephone company.

For Caller ID Type II users (For Australian users only)

When you receive a 2nd call during a conversation, you will hear a signal tone following the call waiting tone and the **conversation will be interrupted or muted for a short period of time.** This is not a fault of the product as these events are normal.

- The tones are generated by the telephone company.

Caller list

Caller information for the last 50 different callers will be logged in the caller list. You can use this list to return missed calls.

- Caller information includes phone numbers, the date and time of calls, and the number of times the caller called.

Missed calls

If a call is not answered, the unit treats the call as a missed call. The number of missed calls is shown on the display. This lets you know if you should view the caller list to see who called while you were out.

Viewing the caller list and calling back

1 Press 【**MENU**】(【**F2**】key), then press 【**SELECT**】(【**F3**】key) or 【**SET**】.
OR
Press 【∨】or 【∧】to enter the caller list.

2 Press 【∨】to search from the most recent call, or press 【∧】to search from the oldest call.
- To exit the caller list, press 【**STOP**】.

3 Press 【**CALL**】(【**F1**】key) or 【📞】.

Note:

- Calling back will not be possible if the caller information does not include a phone number.
- In some cases, you may have to edit the number before dialling (page 18).

Displayed symbols

- If the same caller calls more than once, it will be displayed with the number ("**×2**" to "**×9**"). Only the date and time of the most recent call will be stored.
- A ✓ is displayed next to items which have already been viewed or answered.

Editing a caller's phone number before calling back

You can edit a phone number in the caller list.

1 Press 【∨】or 【∧】to enter the caller list.

2 Press 【∨】or 【∧】repeatedly to display the desired item.

3 Press 【**EDIT**】(【**F2**】key).

4 Add or erase digits to the beginning of the number as necessary.
- To add a digit, press the desired dial key.
- To erase a digit, press 【**CLEAR**】or 【#】.

5 Press 【**CALL**】(【**F1**】key) or 【📞】to call back.

Note:

- The edited phone number will not be saved in the caller list.

Storing caller information into the phonebook

1 Press 【∨】or 【∧】to enter the caller list.

2 Press 【∨】or 【∧】repeatedly to display the desired item.
- If you want to edit the number, press 【**EDIT**】(【**F2**】key), then edit the number (see step 4 above).

3 Press 【**SET**】or 【**SAVE**】(【**F3**】key).
- "**Enter name**" will be displayed.
- If you edited the number in step 2, 【**SAVE**】does not appear above 【**F3**】key. Press 【**SET**】.
- If the caller has name information, the name and phone number will be saved. Skip to step 6.

4 Enter the name if necessary (see page 13, step 3).

5 Press **【SET】**, then press **【SAVE】** (**【F3】** key).

6 Press **【STOP】** to exit.

Note:

- If the caller information in the caller list does not include a phone number, you cannot store it in the phonebook.

Erasing caller information

Erasing a selected item

1 Press **【∨】** or **【∧】** to enter the caller list.

2 Press **【∨】** or **【∧】** repeatedly to display the desired item.

3 Press **【CLEAR】**.

- To erase other items, repeat from step 2.
- To exit the caller list, press **【STOP】**.

Erasing all items

Make sure that you have no missed calls.

1 Press **【∨】** or **【∧】** to enter the caller list.

2 Press **【ERASE】** (**【F1】** key).

- "**`All erase?`**" will be displayed.
- To cancel erasing, press **【NO】** (**【F1】** key).

3 Press **【YES】** (**【F2】** key).

Programming via direct commands

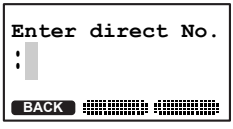
You can program features using “direct commands”– special codes that take you directly to the feature you wish to program and allow you to select the desired setting. There is no need to scroll through the unit’s sub-menus.
Details of each feature can be found on the corresponding pages.

Important:

- Before programming, make sure the unit is not being used.

1 Press **【MENU】** (**【F2】** key).

2 Press **【#】**.



3 Enter the desired feature code (shown below).

4 Enter the desired setting code (shown below).

- This step may vary depending on the feature being programmed.

5 Press **【SAVE】** (**【F3】** key).

6 Press **【STOP】** to exit programming mode.

Note:

- If the unit beeps 5 times, you entered an invalid code. Enter the correct code.
- If you enter the wrong code, press **【CLEAR】**.
- To exit programming, press **【STOP】** at any time.

Direct commands chart

Note:

- The default settings are indicated by *.

Feature	Feature code	Setting code	Page
Ringer volume	**【1】【6】【0】**	**【1】**: Low **【2】**: Medium **【3】**: High* **【0】**: Off	page 23
Ringer tone	**【1】【6】【1】**	**【1】–【3】**: Tone pattern 1*–3	page 23
LCD contrast	**【1】【4】【5】**	**【1】–【6】**: Level 1–6 (Default: 3)	page 23
Key tone	**【1】【6】【5】**	**【1】**: On* **【0】**: Off	page 25
Set area code	**【2】【5】【5】**	Go to step 2 on page 24.	page 24

Feature	Feature code	Setting code	Page
Set recall time	**【1】【2】【1】**	**【1】**: 900 ms **【2】**: 700 ms **【3】**: 600 ms **【4】**: 400 ms **【5】**: 300 ms **【6】**: 250 ms **【7】**: 200 ms **【8】**: 160 ms **【9】**: 110 ms **【✳】**: 90 ms **【0】**: 100 ms* **【⌗】**: 80 ms	page 24

Programming using the function keys

You can program features using the functions keys (**【F1】**, **【F2】** and **【F3】** keys).
For your reference, a chart of all programmable functions is printed below. Details for each item can be found on the corresponding pages.

Important:

- Before programming, make sure the unit is not being used.

1 To begin programming, press **【MENU】** (**【F2】** key).

2 Press 【∨】 or 【∧】 to scroll through the main menu.

3 Press **【SELECT】** (**【F3】** key) to select the desired main menu item.

4 Press 【∨】 or 【∧】 to scroll through the sub-menu.

5 Press **【SELECT】** (**【F3】** key) to select the desired sub-menu item.

6 Press 【∨】 or 【∧】 repeatedly to select the desired setting.

7 Press **【SAVE】** (**【F3】** key) to save the new setting.

8 Press **【STOP】** to exit programming mode.

Note:

- The default settings are indicated by *.

Main menu	Sub-menu	Option	Reference page for programming
Caller list	-	-	page 18
Ringer setting	Ringer volume	Low, Medium, High*, Off	page 23
	Ringer tone	Pattern 1*–3	page 23
Initial setting	LCD contrast	Level 1–6 (Default: 3)	page 23
	Key tone	On*, Off	page 25
	Set area code	-	page 24
	Set recall time	900 ms, 700 ms, 600 ms, 400 ms, 300 ms, 250 ms, 200 ms, 160 ms, 110 ms, 100 ms*, 90 ms, 80 ms	page 24

During programming:

- To exit programming, press **【STOP】** at any time.
- You can press **【SET】** instead of pressing **【SELECT】** (**【F3】** key) and **【SAVE】** (**【F3】** key).
- To go back to the previous menu, press **【BACK】** (**【F1】** key).
- A ✓ indicates the current setting.

Ringer settings

Ringer volume

4 levels (high/medium/low/off) are available.

1 Press **【MENU】** (**【F2】** key), then press **【#】**, **【1】**, **【6】**, **【0】**.

2 Press **【1】** to **【3】**, or **【0】** to select the desired setting.
【1】: Low **【2】**: Medium
【3】: High **【0】**: Off

3 Press **【SAVE】** (**【F3】** key), then press **【STOP】**.

Ringer tone

You can change the ringer tone heard when an outside call is received. There are 3 tones.

1 Press **【MENU】** (**【F2】** key), then press **【#】**, **【1】**, **【6】**, **【1】**.

2 Press **【1】** to **【3】** (Tone pattern 1 to 3).
- If the ringer volume has been turned off, the unit will not ring.

3 Press **【SAVE】** (**【F3】** key), then press **【STOP】**.

Display options

LCD contrast

You can adjust the unit display contrast. There are 6 levels.

1 Press **【MENU】** (**【F2】** key), then press **【#】**, **【1】**, **【4】**, **【5】**.

2 Press **【1】** to **【6】** (Level 1 to 6).

3 Press **【SAVE】** (**【F3】** key), then press **【STOP】**.

Telephone settings

Recall time

The recall time depends on your telephone exchange or host PBX.

1 Press **【MENU】** (**【F2】** key), then press **【#】**, **【1】**, **【2】**, **【1】**.

2 Press **【0】** to **【9】**, **【*】** or **【#】** to select the desired setting.
【1】: 900 ms **【2】**: 700 ms **【3】**: 600 ms
【4】: 400 ms **【5】**: 300 ms **【6】**: 250 ms
【7】: 200 ms **【8】**: 160 ms **【9】**: 110 ms
【*】: 90 ms **【0】**: 100 ms **【#】**: 80 ms
(ms=milliseconds)

3 Press **【SAVE】** (**【F3】** key), then press **【STOP】**.

Note:

- If the unit is connected via a PBX, certain PBX functions (call transferring, etc.) may not work correctly. Consult your PBX supplier for the correct setting.
- You can access Telstra's "EASY CALL" service by having the recall time set at 100 ms, and then follow Telstra's "EASY CALL" instructions to operate this service **(For Australian users only)**.
- If you use Call Waiting, change the recall time to 600 ms. If you use PBX functions, ask the PBX administrator for the appropriate recall time then set it **(For New Zealand users only)**.

Storing your area code

We recommend storing your area code before using Caller ID (page 17). Calls from the same area will be recorded in the caller list without the area code. You do not have to remove it before calling back the caller or storing in the phonebook.

1 Press **【MENU】** (**【F2】** key), then press **【#】**, **【2】**, **【5】**, **【5】**.

2 Enter your area code (max. 8 digits).
- To correct a digit, press **【<】** (**【F1】** key) or **【>】** (**【F2】** key) to move the cursor, then press **【CLEAR】**. Enter the correct number.

3 Press **【SAVE】** (**【F3】** key), then press **【STOP】**.

To erase your area code

Press and hold **【CLEAR】** in step 2, press **【SAVE】** (**【F3】** key), then press **【STOP】**.

Note:

- The use of this feature can prevent a National Call from being dialled. For example, the "03" for South Island callers will be omitted and will therefore prevent a National Call to other areas of the South Island. **(For New Zealand users)**

Other options

Key tone

You can select whether or not key tones are heard when keys are pressed. Includes confirmation tones and error tones.

1 Press **【MENU】** (**【F2】** key), then press **【#】**, **【1】**, **【6】**, **【5】**.

2 Press **【1】** (On) or **【0】** (Off).

3 Press **【SAVE】** (**【F3】** key), then press **【STOP】**.

Recording a conversation

The total recording capacity is about 120 minutes. A maximum of 64 items can be recorded.

- If 64 items have been recorded, conversation recording memory will become full even if the total recording time is less than 120 minutes.
- If memory becomes full, "**Memory full**" will be displayed. To record additional conversation, erase unnecessary conversations.

1 Press 【**REC.**】(【**F1**】key), while talking.

- When recording starts, the remaining recording time will be displayed in minutes for about 3 seconds. "**-2way recording-**" will be displayed while recording.
- If the remaining recording time is less than 6 minutes, the IN USE indicators will flash slowly in amber and green, and the remaining time will be displayed as shown below:

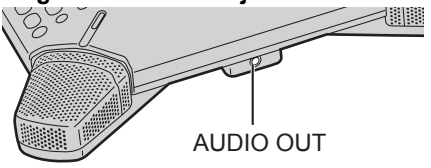
Remaining time	Display
less than 6 minutes	→ **Remaining:5min**
less than 5 minutes	→ **Remaining:4min**
less than 4 minutes	→ **Remaining:3min**
less than 3 minutes	→ **Remaining:2min**
less than 2 minutes	→ **Remaining:1min**
less than 1 minute*1	→ **Remaining:0min**

*1 When recording starts, the remaining recording time will be displayed in seconds for about 3 seconds.

- If mute is on, the IN USE indicators flash in red.

2 To stop recording, press 【**STOP**】.

Using the AUDIO OUT jack



- Conversations are also routed through the AUDIO OUT jack. This allows you to connect recording equipment (cassette recorder, computer, etc.) and record conversations without using the unit's recording memory.
- Recorded conversations are also routed through the AUDIO OUT jack during playback.
- Connect "AUX IN" or "LINE IN" jack of recording equipment using an optional audio cable with a 3.5 mm mono plug.

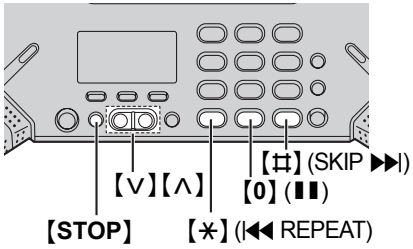
Note:

- When you record your 2-way telephone conversation, you should inform the other party that the conversation is being recorded.
- **For Call Waiting service users**
  If you receive a call during recording, perform the following to answer the 2nd call:
  — If you do not want to record the 2nd call, press 【**STOP**】, then press 【**RECALL**】.
  — If you want to record the 2nd call, press 【**RECALL**】. The unit continues recording.

For New Zealand users

All persons using this device for recording telephone conversations shall comply with New Zealand law. This requires that at least one party to the conversation is to be aware that it is being recorded. In addition, the principles enumerated in the Privacy Act 1993 shall be complied with in respect to the nature of the personal information collected, the purpose for its collection, how it is to be used and what it disclosed to any other party.

Playing back a recorded conversation



When conversations have been recorded, "" and the total number of recorded conversations are displayed while the unit is in standby mode.

Press 【PLAY】(【F1】key).

- The unit will play back the new recorded conversations.
- When you have no new recorded conversations, the unit will play back all recorded conversations.
- If the unit has no recorded conversations, the display will show "**No recordings**", and the unit will go back to standby mode.

Note:

- The current conversation number (for example, "**#1**") is displayed during playback.

During playback

Key	Command
【FF】(【F3】key)	Change fast-forward speed (four times or sixty times normal speed), each time you press 【FF】 ● If 【PLAY】(【F2】key) is pressed during fast-forwarding, playback will be resumed at normal speed. ● The selected speed will flash on the display ("**x4**" or "**x60**").
【REW】(【F1】key)	Change rewind speed (four times or sixty times normal speed), each time you press 【REW】 ● If 【PLAY】(【F2】key) is pressed during rewinding, playback will be resumed at normal speed. ● The selected speed will flash on the display ("**x4**" or "**x60**").
【✳】(|◀◀)	Repeat conversation ● If 【✳】(|◀◀) is pressed within the first 2 seconds, the previous conversation will be played. ● If 【✳】(|◀◀) is pressed during playback of the first conversation, the first conversation will be repeated.
【⌗】(▶▶|)	Skip conversation
【0】(❚❚)	Pause playback ● To resume playback, press 【PLAY】(【F2】key). ● To stop playback completely, press 【STOP】.
【STOP】	Stop playback

To adjust the speaker volume

Press 【∧】 or 【∨】 repeatedly during playback. 8 levels (high to low) are available.“**Receiver volume**” is displayed.

Erasing a specific conversation

1 Press **【ERASE】** (**【F2】** key) while listening to the conversation you want to erase.

2 Press **【SELECT】** (**【F3】** key) at “**Individual erase**”.

- The display shows “**Erased**”, then the next one will be played.

Erasing all conversations

1 Press **【ERASE】** (**【F2】** key) while listening to the conversation.

2 Press 【∨】 or 【∧】 to select “**All erase**”.

3 Press **【SELECT】** (**【F3】** key).

- The display shows “**All erased**”.

Display messages

One of the following messages will be displayed in the condition described below.

Display message	Cause & solution
Phonebook full	● There is no space to store new items in the phonebook. Erase unnecessary items (page 15).
No items stored	● Your phonebook, redial list or caller list is empty.
Memory full	● Conversation recording memory is full. Erase unnecessary items (page 28)

Troubleshooting

General use

Problem	Cause & solution
The unit does not work.	● Check the connections (page 7). ● Unplug the unit's AC adaptor or Interface cable to reset the unit. Reconnect the adaptor or interface cable and try again.
I cannot hear a dial tone.	● Confirm that the telephone line cord is connected (page 7). ● Disconnect the unit from the telephone line and connect a known working telephone. If the working telephone operates properly, contact our service personnel to have the unit repaired. If the working telephone does not operate properly, contact your telephone company.

Programmable settings

Problem	Cause & solution
I cannot program items.	● Do not pause for over 1 minute while programming.
While programming, the unit starts to ring.	● A call is being received. Answer the call and start again from the beginning after a call is finished.

Making/answering calls

Problem	Cause & solution
Noise is heard while talking.	● If your unit is connected to a telephone line with ADSL service, we recommend connecting a noise filter between the unit and the telephone line socket (page 8). Contact your ADSL provider for details **(For Australian users)**. ● Your unit is connected to a telephone line with ADSL (JetStream) service. We recommend that you contact your ADSL service provider to have an ADSL Splitter installed. We do not recommend the use of generic ADSL filters. Contact your ADSL provider for details **(For New Zealand users)**. ● If your unit is near noisy equipment such as computers or fans, you may not be able to hear easily the other party's voice. Turn off noisy equipment on both parties.
Short silences, echoes, or speech cuts occur.	● At the beginning of a call, both parties should speak alternately. This enables the unit to adapt to its environment and let both parties speak effectively. ● Do not move the unit while it is in use. ● Keep your hands away from the unit during calls. ● Keep files, cups, coffee pots, etc., away from the unit. ● The other party's phone might not be full duplex. For best sound quality, the other party should use a handset phone or full duplex speakerphone. ● Use the unit in a quiet room.
The other party's voice is muffled or sounds "in a well".	● Speak closer to the unit. ● If your room has glazed windows, we recommend that you draw a curtain or pull a blind.
I cannot make a call.	● The unit is not designed to be used with rotary (pulse dialling) services.
I cannot redial by pressing **【REDIAL】**.	● If the last number dialled was more than 48 digits long, the number will not be redialled correctly. ● If you press **【REDIAL】** after you have entered the phone number, this button functions as the **【PAUSE】** button. To redial, press **【**🔊**】**, then press **【REDIAL】**, or press **【REDIAL】**, select desired phone number by pressing **【**∨**】** or **【**∧**】**, then press **【**🔊**】** or **【CALL】**.

Phonebook

Problem	Cause & solution
I cannot store an item in the phonebook.	● You cannot store an item in the phonebook while the unit is in speakerphone mode, or while listening to recorded conversations. ● Do not pause for over 1 minute while storing.
While storing an item in the phonebook, the unit starts to ring.	● A call is being received. Answer the call and start again from the beginning after a call is finished.
The display exits the phonebook while searching.	● The unit automatically exits after 1 minute of inactivity.

Caller ID

Problem	Cause & solution
The unit does not display the caller's phone number.	● You have not subscribed to Caller ID service. Contact your telephone service provider to subscribe. ● If your unit is connected to any additional telephone equipment such as Caller ID box or wireless telephone jack, disconnect the unit from the equipment and plug the unit directly into the wall jack. ● If your unit is connected to a telephone line with ADSL service, we recommend connecting a noise filter between the unit and the telephone line socket (page 8). Contact your ADSL provider for details **(For Australian users)**. ● Your unit is connected to a telephone line with ADSL (JetStream) service. We recommend that you contact your ADSL service provider to have an ADSL Splitter installed. We do not recommend the use of generic ADSL filters. Contact your ADSL provider for details **(For New Zealand users)**. ● Other telephone equipment may be interfering with this unit. Disconnect the other equipment and try again. ● The caller requested not to send caller information (page 17).
The display exits the caller list while searching.	● The unit automatically exits after 1 minute of inactivity.

Power failure

Problem	Cause & solution
The unit will not function.	● This product is not designed to make calls in the event of a power failure.

Instructions to customer (For Australian users)

Installation

Attached to this apparatus is an approval label. This label is evidence that it is a “Permitted Attachment” which has been authorised to be connected to your telephone service. Conditions relating to connection and operation of this Permitted Attachment are contained in Telecommunications General By-Law 220 (5).

You are authorised to install this Permitted Attachment yourself by plugging it into the line socket of any regular telephone. You may connect it in place of your existing telephone or to any spare telephone socket installed in your premises.

To disconnect your existing telephone you must first remove its plug from the line socket. You can then insert the plug of your Permitted Attachment into the socket and use your equipment.

If the plug of your existing telephone cannot be readily removed, you will have to remove the screw securing it. To do this proceed as follows:

1. Loosen screw “A” sufficiently to remove the socket cover. (See Fig. 1.)
2. Remove screw “B” and withdraw the plug. (See Fig. 2.)
3. Replace screw “B”. (See Fig. 3.) Ensure that it screws completely into the socket recess. (If the screw is too long, increase the hole depth or replace the screw with one 5 mm shorter.)
4. Replace socket cover and tighten screw “A”. (See Fig. 4.)

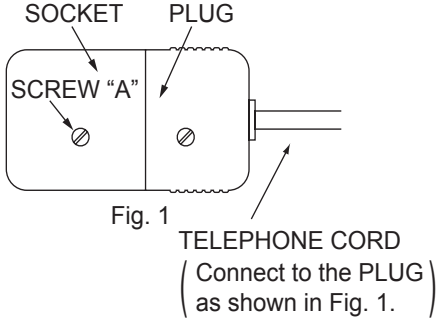


Fig. 1

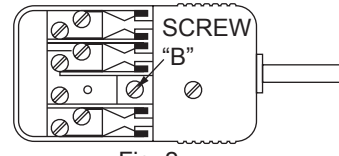


Fig. 2

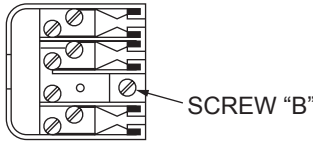


Fig. 3

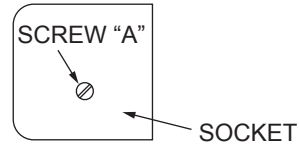


Fig. 4

If you are satisfied with the operation of your telephone service after plugging in your Permitted Attachment, your installation is completed.
You will be unable to connect this Permitted Attachment if your telephone service consists only of a wall phone or an old style telephone which is not connected by means of a modern plug and socket. In such cases a new socket will need to be installed.
Should the Permitted Attachment not operate when plugged into a socket, it is either faulty or unsuitable for operation with your telephone service. It should be returned to the store where purchased or an Authorised Service Centre.

Service difficulties
If at any time a fault occurs on your telephone service, carry out the following checks before you call for service:

- Disconnect the Permitted Attachment and try using the service with the normal telephone.
- If the telephone service then operates satisfactorily, the fault is in your Permitted Attachment. Leave the Permitted Attachment disconnected and report the fault to its supplier or agent to arrange for repair.
- If when using the telephone the service is still faulty, report the fault to “Service Difficulties and Faults” for attention.

You are required to keep this Permitted Attachment in good working order while it is connected to your telephone service. Its construction or internal circuit must not be modified in any way without permission.

Specifications

Speakerphone unit

Operating environment:
5 °C – 40 °C

Dimensions:
Approx. height 64 mm x width 279 mm x depth 279 mm

Mass (Weight):
Approx. 970 g

Audio Out:
Typical: Approx. −3 dBm (at 10 kΩ), 0.03 mW
Maximum: Approx. 0 dBm (at 10 kΩ), 0.06 mW
ø3.5 mm mono mini jack

Power consumption:
Standby: Approx. 4.0 W
Maximum: Approx. 7.0 W

Power supply:
AC adaptor (220-240 V AC, 50/60 Hz)

Interface box

Dimensions:
Approx. height 32 mm x width 67 mm x depth 76 mm

Mass (Weight):
Approx. 60 g

Note:

- Design and specifications are subject to change without notice.
- The illustrations in these instructions may vary slightly from the actual product.

Index

A Accessories: *3*
Answering calls: *12*
Area code: *24*
C Caller ID service: *17*
Caller list
Calling back: *18*
Editing: *18*
Erasing: *19*
Storing: *18*
Viewing: *18*
Call waiting: *12*
Chain dial: *16*
Controls: *9*
D Display messages: *29*
F Function keys: *10*
Function menu
Direct commands: *20*
Table: *22*
I Installation
AC adaptor: *7*
Interface box: *7*
Interface cable: *7*
Telephone line cord: *7*
K Key tone: *25*
L LCD contrast: *23*
M Making calls: *11*
Memory capacity: *26*
Mute: *12*
P Pause: *11*, *16*
Phonebook
Adding: *13*
Calling: *14*
Editing: *15*
Erasing: *15*
Power failure: *7*, *31*
Private name display: *17*
R Recall button: *12*
Recall time: *24*
Recording a conversation: *26*
Recording time: *26*
Redial: *11*
Redial list: *11*
Ringer tone: *23*
Ringer volume: *23*
S Safety instructions: *4*
Specifications: *34*
Sp-phone: *11*
T Troubleshooting
Caller ID: *31*
General use: *29*
Making/answering calls: *30*
Phonebook: *31*
Power failure: *31*
Programmable settings: *29*
V Volume control: *11*, *28*

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N52

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